

International Application No  
PCT/EP2005/000422

Form PCT/ISA/210 (second sheet) (January 2004)

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2005/000422

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE REGISTRY [Online] 26 March 1998 (1998-03-26), XP002324987 retrieved from STN RN : 203179-84-4 abstract</p>	1-9
A	<p>----- US 5 326 826 A (ROESCHERT ET AL) 5 July 1994 (1994-07-05) column 8, lines 11-16,41-47; claim 1</p>	1-13
A	<p>----- US 5 623 014 A (BAUER ET AL) 22 April 1997 (1997-04-22) cited in the application column 1, lines 60-65; claims 1,5,6</p>	1-13
A	<p>----- EP 0 003 516 A (BASF AKTIENGESELLSCHAFT) 22 August 1979 (1979-08-22) cited in the application column 1, lines 35-40; claim 1 column 2, lines 10-15 column 6, lines 2-8 -----</p>	1-13

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP2005/000422

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☒ Claims Nos.: **1-13 (part)**  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  
**see supplemental sheet PCT/ISA/210**
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

**see supplemental sheet**

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
**1-13**

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.  
☐ No protest accompanied the payment of additional search fees.

## Continuation of II.2

Claims: 1-13 (in part)

1. The current claims 1-13 pertain to dispersions or solutions of some polymer containing somewhere in its structure a defined quantity of a 3,4 dihydroxyphenyl group radical. Claim 1-13 thus relate to an inordinately large number of products, only a small proportion of which are supported by the description (PCT Article 6) and/or can be considered as having been disclosed in the application (PCT Article 5).

2. Moreover, the application describes only dispersions and does not explain how the claimed solutions can be attained. The claimed solutions are thus unsupported and/or insufficiently disclosed (PCT Articles 5 and 6).

3. In the present case the claims lack the proper support and the application lacks the requisite disclosure to such an extent that it appears impossible to carry out a meaningful search covering the entire range of protection sought. Therefore, the search was directed to the parts of the claims that appear to be supported and disclosed in the above sense, that is the parts concerning the following:

dispersions of a copolymer in water, organic solvents or mixtures thereof, characterized in that the copolymer contains at least 0.001 mol 3,4 dihydroxyphenyl groups (calculated at 109 g/mol) for 100g polymer, the copolymer being one produced by radical polymerization of i) ethylenically unsaturated monomers and ii) monomers according to claim 7, in conjunction with claims 6, 5 and 4.

The applicant is advised that claims relating to inventions in respect of which no international search report has been established normally cannot be the subject of an international preliminary examination (PCT Rule 66.1(e)). In its capacity as International Preliminary Examining Authority the EPO generally will not carry out a preliminary examination for subjects that have

not been searched. This also applies to cases where the claims were amended after receipt of the international search report (PCT Article 19) or where the applicant submits new claims in the course of the procedure under PCT Chapter II. After entry into the regional phase before the EPO, however, an additional search can be carried out in the course of the examination (cf. EPO Guidelines, Part C, VI, 8.5) if the deficiencies that led to the declaration under PCT Article 17(2) have been remedied.

The International Searching Authority has determined that this international application contains multiple (groups of) inventions, namely

1. Claims 1-13

dispersions or solutions of a polymer in water, organic solvents or mixtures thereof, characterized in that the polymer contains at least 0.001 mol 3,4-dihydroxyphenyl groups (at 109 g/mol) for 100g polymer.

---

2. Claims 14-16

radical polymerizable monomers with 3,4-dihydroxyphenyl groups and at least one radical polymerizable double bond.

---

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2005/000422

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5326826	A	05-07-1994	DE 4106357 A1	03-09-1992
			AU 1125492 A	03-09-1992
			BR 9200681 A	10-11-1992
			CA 2061991 A1	29-08-1992
			DE 59200671 D1	01-12-1994
			EP 0501294 A1	02-09-1992
			JP 3152986 B2	03-04-2001
			JP 5105715 A	27-04-1993
			MX 9200826 A1	01-08-1992
			ZA 9201456 A	25-11-1992
-----				
US 5623014	A	22-04-1997	DE 4219384 A1	23-12-1993
			AU 666556 B2	15-02-1996
			AU 4321793 A	04-01-1994
			BR 9306547 A	15-09-1998
			CA 2137932 A1	23-12-1993
			CN 1080936 A ,C	19-01-1994
			DE 59304754 D1	23-01-1997
			WO 9325588 A1	23-12-1993
			EP 0644902 A1	29-03-1995
			ES 2095057 T3	01-02-1997
			FI 945835 A	26-01-1995
			JP 7507820 T	31-08-1995
			MX 9303238 A1	31-01-1994
-----				
EP 0003516	A	22-08-1979	AT 362586 B	25-05-1981
			AT 55779 A	15-10-1980
			CA 1151786 A1	09-08-1983
			DE 2960217 D1	23-04-1981
			DK 31779 A ,B,	27-07-1979
			EP 0003516 A1	22-08-1979
			ES 477135 A1	01-12-1979
			JP 1342177 C	14-10-1986
			JP 54110248 A	29-08-1979
			JP 61006861 B	01-03-1986
			NO 790255 A ,B,	27-07-1979
			US 4250070 A	10-02-1981
-----				